

U.S. Army
Edgewood Chemical Biological Center
Organization Overview

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

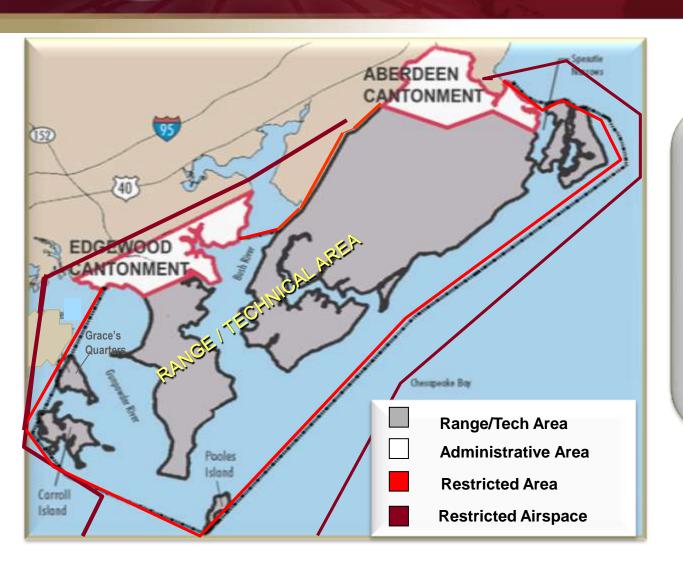
Harford/Cecil Leadership Academy,

Ms. Suzanne Milchling, Director, Directorate of Program Integration 08 May 2013



APG Aberdeen and Edgewood Areas





Geographic Area

- Total Acres 72,000
- Cantonment Area 6,900 acres
- Range Area 30,600 land acres
- Water 34,500 acres or 58 sq miles and 144 miles of shoreline

Developed Infrastructure

- Test facilities 57
- Surety buildings 13
- Buildings 2,410
- Road net work 210 paved miles
- Leased Area 1,015 acres
- Potential Leased Area 500+ acres



Where ECBC Fits





Medical Research

Institute of Chemical

Defense (MRICD)

Medical Research

Institute of Infectious

Diseases (MRIID)

Chemical Material

Activity

Assembled

Chemical

Weapons

Alternative

(ACWA)

Edgewood Chemical

Biological Center

(ECBC)

20th Support

Command

(CBRNE

U.S. Army

CBRN School







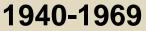


Adapt in a Changing World



1915-1939

Response to Chemical Threat



Increased Research & Development

1970-1999

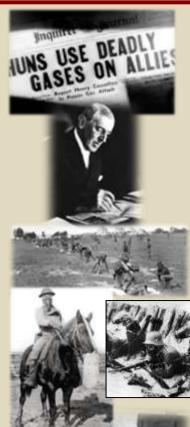
Progress Toward Elimination

2000-2009

Supporting the Global War on Terror

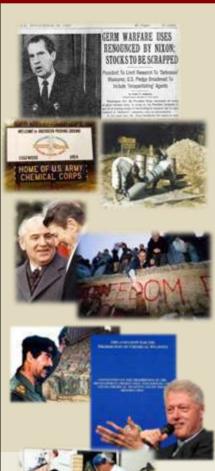
2010-Today

Address Emerging
Threats



Approved for Public Release















ECBC Senior Leadership



Safety Director George Collins



TECHNICAL DIRECTOR
Joseph Wienand
SES Tier 2



Associate Technical Director James Baker, Ph.D.

Senior Scientific Professional, Chemistry Way Fountain, Ph.D. Tier 1



Senior Scientific Professional, Biotechnology Jay Valdes, Ph.D. Tier 1



RESEARCH & TECHNOLOGY Director Joseph Corriveau, Ph.D. SES Tier 1

408 total personnel 18 critical facilities



PROGRAM INTEGRATION Director Suzanne Milchling SES Tier 1

394 total personnel 10 critical facilities



ENGINEERING Director Alvin "AJay" Thornton SES Tier 1

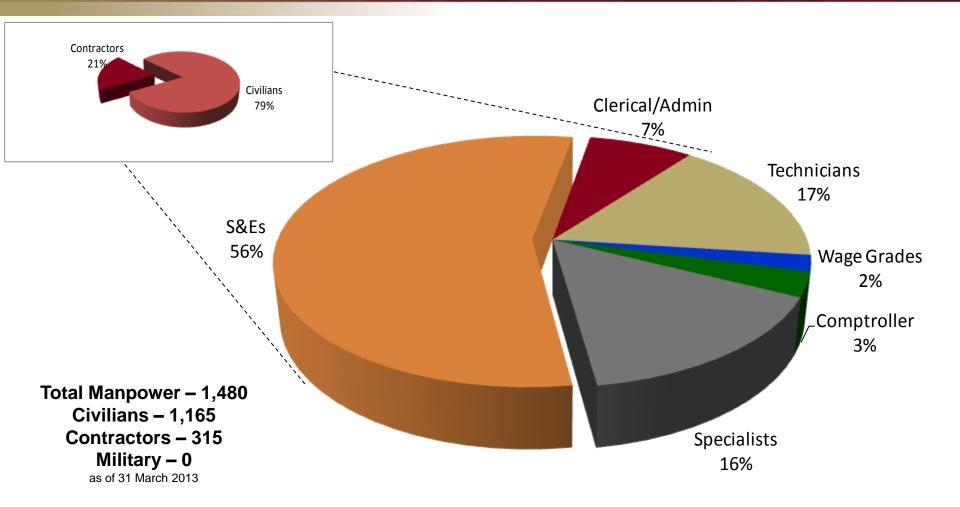
635 total personnel 21 critical facilities

Senior Scientific Professional, Bio Chemistry Jose-Luis Sagripanti, Ph.D. Tier 1



Core Personnel Distribution





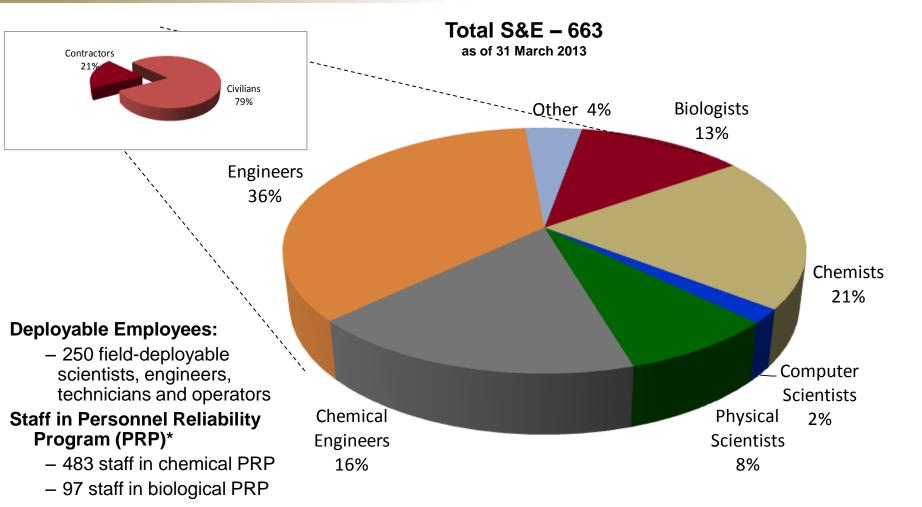
Clerical/Admin		Technicians	Wage Grade	Comptrollers	Specialists	S&Es
	62	189	24	38	189	663

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Technical Staff by Discipline





Biologists	Chemists	Computer Scientists	Physical Scientists	Chemical Engineers	Engineers	Other
84	142	12	53	105	237	30



ECBC Unique Facilities



Facilities

- \$1.8 billion in facilities, equipment
- 1.22 million square feet of critical laboratory and chamber space
- Over 200 buildings
- Sophisticated environmental controls
- Robotic components
- 317 chemical surety hoods
- 66 BSL-2 and BSL-3 hoods
- 3 explosive/toxic test chambers
- 30 multi-purpose mobile platforms for air monitoring
- 30 operational mobile laboratories with hoods and glove boxes

Major Research Facilities



Advanced Chemistry Laboratory



McNamara Life Sciences Bldg.



Bio Technology Laboratory



Forensic Analytical Center

Engineering & Test Facilities



Toxic Test Chambers





Berger Engineering Complex

New, One-of-a-Kind Facilities



Standoff Detection Technology Evaluation Facility



Sample Receipt Facility



Phase II of ACL - Third Wing



Single Small-Scale Facility



Technology Transfer at ECBC



- Enables ECBC to accomplish technology transition objectives for the warfighter while benefiting U.S. industry
- Allows R&D collaborations, product development and testing with industry and academia

• Enables industry, academia and other organizations to leverage ECBC's unique assets: intellectual property

portfolio, S&E expertise, infrastructure



ECBC POC: technical.outreach@apgea.army.mil





Mechanisms include:

- Cooperative Research & Development Agreements (CRADAs)
- Technology Support Agreements (TSAs)
- Patent License Agreements (PLAs)
- •Other Agreements (IAAs, MOAs, MOUs)

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.



Basic and Applied CB Research





Technical Competencies

- Chemistry & Bioscience of CB Warfare
- CB Analysis and Testing
- CB Agent Handling and Surety
- Science and Technology for the Emerging Threat



The ECBC Genomic Sequencing Center is a Department of Defense (DoD) resource for sequencing efforts in support of the warfighter.



ECBC's Laser Standoff Detection Branch is using Raman chemical imaging (RCI)to detect and identify the presence of trace explosives in fingerprints.

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.



CB Systems Engineering







The Center supported the test and development of the JSGPM mask.



BIDS M31 Non-developmental item, one of three models in the BIDS family

Technical Competencies

- CBRNE Materiel Acquisition
- •CB Analysis and Testing
- •Science and Technology for the Emerging Threat



"Team CBRNE" Edgewood Area, Aberdeen Proving Ground



Department of Defense Center of Excellence for CBRNE

Edgewood Today

ECBC is co-located with other organizations that together form a consolidated chemical biological (CB) defense community:

- **AFMC** Air Force Materiel Command, Non Medical Chemical Biological Defense Development and Acquisition
- **ECBC** Edgewood Chemical Biological Center
- •MRICD Medical Research Institute of Chemical Defense
- *JPEO Joint Program Executive Office for Chemical and Biological Defense
- *JPM for BD Biological Defense
- *JPM for NBC CA Nuclear, Biological and Chemical Contamination Avoidance
- *JPM for CM Consequence Management
- •CMA Chemical Materials Agency
- •ACWA Assembled Chemical Weapons Alternatives
- ***20th Support Command Chemical, Biological, Radiological, Nuclear, High Yield Explosives**
- •AML Army Medical Lab
- Public Health Command
- •DHS Department of Homeland Security
- •FBI Federal Bureau of Investigation
- *JSTO Joint Science & Technology Office





Visitor Safety



ECBC utilizes numerous protective systems to ensure your safety. They include:

- Engineering Controls/CBR Filtration
- Air Monitoring
- Personal Protective Equipment
- Controlled access to restricted areas
- Warning signs
- All ECBC facilities are tied into 911 emergency response system

Hazards present in areas being visited today:

Chemical agents, Toxic industrial chemicals, Toxins, Biological organisms, Mechanical

equipment, Noise









VISITOR REQUIREMENTS

- ✓ Wear personal protective equipment if requested
- ✓ Follow the lead of your escort and alert them
 of any safety hazards
- ✓ Be aware of all warning signs
- ✓ If building emergency alarm sounds, follow escort direction and proceed to nearest exit



EDGEWOOD CHEMICAL BIOLOGICAL CENTER

For more information about the Edgewood Chemical Biological Center visit www.ecbc.army.mil



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